

DROUGHT PREPAREDNESS COUNCIL

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NIM KIDD Council Chairperson

September 22, 2011

TO: The Honorable Rick Perry, Governor, State of Texas

The Honorable David Dewhurst, Lieutenant Governor, State of Texas

Ms. Esperanza Andrade, Secretary of State, State of Texas

The Honorable Steve Ogden, President Pro-Tempore of the Senate, State of Texas

The Honorable Joe Straus, Speaker of the House, State of Texas

The Honorable Steve Ogden, Chairman, Senate Finance Committee, State of Texas

The Honorable Troy Fraser, Chairman, Senate Natural Resources Committee, State of Texas

The Honorable Tommy Williams, Chairman, Senate Committee on Transportation & Homeland Security, State of Texas

The Honorable Jim Pitts, Chairman, House Appropriations Committee, State of Texas

The Honorable Allan Ritter, Chairman, House Natural Resources Committee, State of Texas

The Honorable Rick Hardcastle, Chairman, House Agriculture & Livestock Committee, State of Texas

The Honorable Pete Gallego, Chairman, House Criminal Jurisprudence Committee, State of Texas

Mr. Ray Sullivan, Chief of Staff, Office of the Governor

Mr. Steven McCraw, Texas Governor's Office of Homeland Security

FROM: Assistant Director Nim Kidd, Texas Division of Emergency Management

SUBJECT: Statewide Drought Situation Report

Nim Kidd, Chairman Texas Division of Emergency Mgmt

Lance Williams, Member Texas Department of Agriculture

Gilbert Jordan, Member Texas Department of Transportation

Chris Loft, Member Texas Commission on Environmental Quality

> Michael Dunivan, Member Texas Forest Service

Brenner Brown, Member Texas Water Development Board

Dr. Travis Miller, Member Texas AgriLife Extension Service

David A. Van Dresar, Member Texas Alliance of Groundwater Districts

Vacant, Member
Office of the Governor
Economic Development & Tourism

Gus Garcia, Member Texas Department of Rural Affairs Richard Egg, Member State Soil & Water Conservation Board

Cindy Loeffler, Member Texas Parks & Wildlife Department

Suzanne Burnham, Member Texas Department of State Health Services

Dr. John W. Nielsen-Gammon, Member Office of the State Climatologist

Marisa Callan
Texas Department of Housing and
Community Affairs

1. NEXT COUNCIL MEETING

October 13, 2011 at 2:00 p.m. DPS Headquarters

2. GENERAL CONDITIONS

August 2011 was a month for the record books with the heat and the lack of precipitation. In the midst of one of the worst droughts that the state has ever experienced, Texas only received an average rainfall of 0.73 inches for the month of August. In addition, August 2011 earned the title of the "warmest month ever recorded" with an average statewide temperature of 88.1°F. As the dryness and above normal temperatures persisted, the drought intensified in every climate division of Texas other than areas of Trans-Pecos and the High Plains. According to the U.S. Drought Monitor USDM, the percentage of Texas with at least extreme drought (D3) conditions increased from 91.65% to 95.04% and the percentage of Texas with exceptional drought (D4) designation increased from 75.23% to 81.08% during August. As of the August 30, 2011 USDM depiction of the drought, the presence of D4 conditions in all but one of the Texas climate divisions (Lower Valley) supported the devastating, extensive nature of this drought.

A few cities, such as Abilene and Del Rio, measured above-average precipitation for August, but the majority of the state saw below 50% of the average normal rainfall for the month. South Central Texas, the Upper Coast, the Edwards Plateau, and East Texas all observed less than 10% of the normal August precipitation. Parts of Trans-Pecos and the High Plains improved their drought conditions slightly during August after they received measurable rainfall. Across the state, agriculture was severely affected as water supply levels plummeted, livestock was sold or left to roam, and crops produced fewer and fewer yields. According to the Texas AgriLife Extension Service, the agricultural losses from the drought were estimated to be around \$5.2 billion, a new record. In addition, the dry, hot, and windy conditions in late August proved to enhance the dangerous wildfire situations across Texas.

According to the Climate Prediction Center, drought conditions are forecasted to persist or worsen over the next few months. With the exception of counties near the Gulf of Mexico, the rest of Texas is predicted to experience below normal rainfall. Tropical weather could provide the relief of rain during September, and as the season changes to autumn, expect frontal systems to make their way southward into Texas. However, a steady system of rain is what the state needs. As autumn approaches, warmer temperatures are forecasted to endure statewide.

3. OVERALL STATEWIDE DROUGHT CONDITIONS

The drought is worsening daily in most of Texas climate regions. No relief is in sight. The situation is desperate.

Palmer Drought Severity Index (PDSI):

Based on this index, nine out of the ten climate regions in Texas were in Extremely dry, the highest drought level in this category.

Crop Moisture Index (CMI)

Based on this index, six out of the ten climate regions in Texas were in Extremely Dry, two less than last month. The rest were in severely dry.

Standardized Precipitation Index (SPI)

Based on this index, nine out of ten regions were Extreme Drought, two more than last month.

Keetch-Byram Drought Index (KBDI)

Based on this index, five climate regions were in Exceptionally High fire risk condition, four in Extremely High fire risk condition, and one in Very High fire risk condition.

Stream Flow Index (SFI)

Based on this index, Trans-Pecos region was in Exceptionally low flow, East Texas region in extremely low flow, High Plains, North Central, South Central, Upper Coast, and Southern regions were in severely low flow, Low Rolling region in moderately low flow, and Edwards Plateau region in abnormally low flow.

4. WATER UTILITY STATUS

Over the past month, 170 additional water systems have asked their customers to restrict water use by following outdoor water use restrictions. Overall there are 856 public water systems that are asking their customers to restrict water use, compared to 686 a month ago. Of these systems, 561 are asking customers to follow a mandatory watering schedule and 295 are asking customers to follow a voluntary watering schedule. There are 36 public water systems that have restricted all outside watering, compared to 29 a month ago. A total of 689 water systems have reported to the TCEQ regarding their status using the online form on the TCEQ public website.

Seasonal forecasts continue to predict the drought to persist or intensify in many areas of the state. Increasing demands and the lack of rainfall are resulting in more water systems implementing the various response stages of their Drought Contingency Plans.

5. WATER RIGHTS - STATEWIDE

New temporary water use permit applications are being reviewed on a site-specific basis and issued if there is sufficient surplus water at the requested source. The number of applications for new water use permits and amendments to existing permits was high for the month. Owners of water rights in the Brazos River Basin with restrictions are reminded to call the "Hale Clause Hotline" on a weekly basis to determine if diversion of water is allowed.

On August 8, 2011 the executive director of the TCEQ notified certain junior water-right holders in the upper-middle Brazos River Basin below Possum Kingdom Lake with a priority date of 1960 or later that their right to divert water is immediately suspended. Suspended water rights include those with a priority date of 1960 or later, term, and temporary water-right permits in the upper-middle Brazos River Basin.

In addition on August 8, 2011 the executive director of the TCEQ also notified certain junior water-right holders in the San Saba watershed with a priority date of 1900 or later that their right to divert water is immediately suspended. Suspended water rights included those with a priority date of 1900 or later, term, and temporary water-right permits in the San Saba watershed in Menard and Schleicher counties.

In order to protect public health and welfare, in both the suspended areas water rights with municipal uses or for power generation have not been suspended. Land owners with property adjacent to the river may also continue to divert water for domestic and livestock use as part of their inherent riparian rights.

To ensure that the TCEQ can continue to maintain adequate supplies of surface waters for diverters, the TCEQ is now requiring that all municipalities in senior call areas that have not been suspended due to the senior call must implement mandatory water use restrictions in their drought contingency plans that include prevention of outdoor lawn watering. This will assist the TCEQ in managing the surface water flows in the basin and may help avoid curtailment of junior municipal surface water rights. This action is required because the TCEQ cannot continue to protect municipalities under its concern for and duty to protect public health and welfare if the municipalities are still allowing outdoor watering of lawns and landscapes.

The availability of unappropriated water for new water use permits continues to decrease in all river basins in the State, and the search for long-term, dependable alternate sources of water remains a high priority issue.

6. WATER RIGHTS - LOWER RIO GRANDE / RIO GRANDE WATERMASTER (RGWM)

Current Conditions: On August 27, 2011, the U.S. combined ownership at Amistad/Falcon stood at 74.00% of normal conservation capacity, impounding 2,509,958 acre-feet. Overall, the system is holding 71.53% of normal conservation capacity, impounding 4,235,960 acrefeet with Amistad at 88.95% of conservation capacity, impounding 2,913,692 acre-feet and Falcon at 49.96% of conservation capacity, impounding 1,322,268 acre-feet. Mexico has 68.21% of normal conservation capacity, impounding 1,726,002 acre-feet at Amistad/Falcon.

Allocations: As of printing of the July ownership report, the U.S. has allocated 31,228.738 acre-feet to Class A & B water rights, which include irrigation, mining and recreation. Additionally, the U.S. has an amount of approximately 575,995 acre feet for future allocations in 2011.

Storage & Loss Amistad vs. Falcon: The U.S. is currently storing approximately 1.638 million acre-feet at Amistad (89.0%) and approximately 871,000 acre-feet (56.2%) of normal conservation capacity at Falcon. Evaporation and seepage losses at Amistad cycle, as of 08/27/11, are 248,971 acre-feet. For the same period, the U.S. has lost 269,575 acre-feet at Falcon.

Releases to meet demands: In 2011, (through 08/27/11), Mexico has released 210,741 acre-feet from Amistad and 1,050,394 acre-feet from Falcon for Mexico needs. The U.S. has released 1,167,691 acre-feet from Falcon and 486,528 acre-feet from Amistad for U.S. needs. Combined with gains between Amistad and Falcon, U.S. inflows to Falcon have totaled 644,462 acre-feet. The U.S. demand in the lower Rio Grande has been met at a rate of 55% by direct Rio Grande inflows and Amistad releases this year.

Upper Rio Grande (New Mexico): Currently, Elephant Butte in New Mexico is currently storing 203,488 (10.20%) acre feet and Caballo Dam in New Mexico, downstream of Elephant Butte is storing 7,296 (3.20%) acre-feet.

Outlook: All accounts began 2011 with 100% of their usable balance. The National Weather Service continues to report that the combination of windy days, extremely dry weather and above normal temperatures continue to take a toll on deep South Texas. The drought conditions are mainly affecting agricultural interest and allowing for elevated fire risk danger.

7. SOUTH TEXAS WATERMASTER - GUADALUPE / LAVACA / SAN ANTONIO / NUECES REGION

<u>Area Counties</u>: Bee, Goliad, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Kenedy, Willacy, Brooks, Mc Mullen, Jim Hogg, La Salle, and Webb

Rainfall and Area Conditions: Very little rain occurred during the month of August in this area. Some scattered and isolated rain events occurred throughout the month that provided some soil moisture and runoff into the area streams. The stream flows quickly declined to below normal for this time of the year. With the extended drought and hot weather conditions, the stream flows of area streams continue to decline. The drought continues to extend with most counties being in an "Exceptional Drought." Counties currently experiencing "Exceptional Drought" Conditions at this time are Bee, Goliad, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Jim Wells, Duval, Live Oak, Mc Mullen, La Salle and Webb. Portions of Kenedy, Brooks and Jim Hogg Counties are currently experiencing "Extreme to Exceptional Drought" Conditions at this time. A portion of Kenedy County is also currently experiencing "Severe to Exceptional Drought" Conditions. Willacy County is currently experiencing "Moderate to Severe Drought" Conditions at this time. Most surface water diversions in this area continue to be for municipal and industrial use with little irrigation use being noted.

Approximate Stream flow Conditions:

Site	August Beginning flows CFS	August Ending Flows CFS	August Historical Mean CFS
South Texas Watermaster			
Guadalupe River near Victoria	189.00	164.00	1090.00
San Antonio River near Goliad	89.00	74.00	479.00
San Antonio River at			
McFaddin below Goliad	119.00	64.00	1680.00
Guadalupe River near Tivoli	304.00	255.00	1750.00
Mission River near Refugio	.01	.01	59.00
Nueces River at Calallen Dam	.10	0.00	571.00
Aransas River near Skidmore	2.80	2.90	20.00

Stream flows of the Guadalupe River continue to flow over the "saltwater barrier" near Tivoli, Texas.

Corpus Christi Reservoir System: Little inflows occurred into the Corpus Christi Reservoir System for the month of August. The level of the reservoir system has decreased and was at 61.9% of capacity at the end of the month, impounding 589,459 acre-feet compared to 86.4% of capacity, impounding 823,409 acre-feet at this time last year. The level of Choke Canyon was at 66.6% of capacity, impounding 463,384 acre-feet compared to 84.7% of capacity, impounding 588,852 acre-feet at this time last year. The level of Lake Corpus Christi was at 49.0% of capacity, impounding 126,075 acre-feet compared to 91.2% of capacity, impounding 234,557 acre-feet at this time last year. The City of Corpus Christi continues to divert much of their monthly water supply needs from Lake Texana.

Drought Restrictions: The City of Victoria has reached their water right restriction. TCEQ has allowed the City of Victoria to continue to divert and use surface water from the Guadalupe River. This City of Victoria is currently exchanging ground water for the surface water being diverted from the River. The City of Victoria is introducing 2% more water into the River than what is being diverted. Several other water rights on the Guadalupe River have also met their restriction, but are not actively diverting. Several water rights on the San Antonio River have also met their restrictions, but they are not actively diverting.

<u>Area Counties</u>: Atascosa, Dimmit, Karnes, Gonzales, LaSalle, Wilson, McMullen, Dewitt, Guadalupe, Lavaca, Fayette, Colorado, Wharton, Jackson, and Zavala

Rainfall and Area Conditions: The southernmost portions of this area received no rainfall for the month of August, and the eastern portions of the area, including the Lavaca area, received 0.25 to 1.5 inches. Crops in this entire area are suffering severely due to drought conditions. Irrigation activity has decreased substantially due to a lack of water. Lake Texana is at 52% of capacity.

According to the U.S. Drought Monitor, this area is experiencing "Exceptional Drought" conditions at this time.

Stream flow Conditions: Many stream flows in this area are at all time lows.

Site	August Beginning flows CFS	August Ending flows CFS	August Historical Mean CFS
South Texas Watermaster			
San Antonio River near Falls			
City	70.00	72.00	354.00
Cibolo Creek near Falls City	16.00	14.00	68.00
Guadalupe River near			
Gonzales	263.00	196.00	1580.00
The Lavaca River at Edna	2.80	.71	88.00
Navidad River near Halletsville	.05	.01	25.00
Atascosa River near Whitsett	.56	.31	68.00
Frio River near Tilden	0.00	0.00	163.00
Nueces River near Tilden	0.00	0.00	343.00

Drought Restrictions: Many Water Rights in this area have met the flow restriction stated on the permit. Most Temporary Water Rights have been suspended.

Area Counties: Bastrop, Bexar, Caldwell, Comal, Fayette, Guadalupe, and Hays

Rainfall and Area Conditions: Approximately 0.15 of an inch of rainfall was measured in the San Antonio Regional Area for the month of August. The U.S. Drought Monitor dated August 30, 2011 indicates the San Antonio Regional Area is experiencing "Exceptional" Drought conditions at this time.

Stream flow Conditions: The flows in the Guadalupe, San Marcos, and Blanco Rivers have continued to decrease due to the lack of rainfall for the month of August. The small creeks and perennial creeks have continued to remain dry. Irrigation use has remained constant and industrial use remains constant.

Site	August Beginning flows CFS	August Ending flows CFS	August Historical Mean CFS
South Texas Watermaster			
Guadalupe River at Spring Ranch	0.00	0.00	270
San Marcos River at Luling	84.00	69.00	267.00
Blanco River at Wimberley	9.40	8.30	57.00

As of August 31, 2011, Canyon Lake Reservoir was at 901.36 feet elevation and 84.29% of capacity, impounding 319,277 acre-feet. Lake Medina Reservoir was at 1024.06 feet elevation and 32.10% of capacity, impounding 81,790 acre-feet. San Marcos Springs were flowing at 97 CFS. The historical monthly average for the San Marcos Springs in August is 187 CFS. Comal Springs were flowing at 159 CFS. The historical monthly average for the Comal Springs in August is 263 CFS. The J-17 Bexar reading was at 641.1 on August 31.

Drought Restrictions: Some water rights restrictions have been met. At this time temporary permits have been suspended in several counties.

Area Counties: Bandera, Blanco, Kendall and Kerr

Rainfall and Area Conditions: This area received 0.01 to 1.3 inches of rainfall for the month of August. The Crop Moisture Index indicates this area of the hill country is classified as "Severely Dry". Most of the surface water diversions in this area are for municipal and industrial uses with a few surface water permit holders irrigating hay and sod fields. The U.S. Drought Monitor indicates that this area is currently experiencing "Exceptional Drought" conditions.

Site	August Beginning flows CFS	August Ending flows CFS	August Historical Mean CFS
South Texas Watermaster			
Guadalupe River at Kerrville	13.00	9.20	106.00
Guadalupe River at Comfort	16.00	6.70	227.00
Medina River at Bandera	0.00	0.00	86.00

All the major streams and their tributaries are dry or below their historical averages.

Drought Restrictions: Currently Water Right Permits from 1950 to present are still suspended, as well as all temporary water permits above Canyon Lake and Lake Medina. The City of Kerrville's surface water diversions from the Guadalupe River are currently at 250,000 gallons per day.

Area Counties: Edwards, Real, Kinney, Uvalde, Zavala, Dimmit, Medina, and Frio

Rainfall and Area Conditions: Currently Water Right Permits from 1950 to present are still suspended, as well as all temporary water permits above Canyon Lake and Lake Medina. The City of Kerrville's surface water diversions from the Guadalupe River are currently at 250,000 gallons per day.

Stream flow Conditions: Most stream flow readings in this area are at or near historical lows at this time.

Site	August Starting flows CFS	August Ending flows CFS	August Historical Mean CFS
South Texas Watermaster			
Nueces River at Laguna	5.40	4.30	157.00
Nueces River near Brackettville	0.00	0.00	57.00
Nueces River below Uvalde	0.46	0.00	196.00
Frio River at Concan	0.00	0.00	108.00
Sabinal River at Sabinal	0.00	0.00	33.00
Leona River near Uvalde	0.00	0.00	27.00

Drought Restrictions: All Water Rights that are active and not met any flow restrictions have been restricted to pumping schedules. All temporary permits in the area are currently suspended at this time.

<u>Area Counties:</u> Sterling, Tom Green, Irion, Concho, Coke, Glasscock, Runnels, Reagan, Schleicher.

Rainfall and Area Conditions: The Concho River Valley received below average rainfall amounts for the month of August. Rainfall in San Angelo was 1.64 inches. Areas surrounding San Angelo received slightly higher rainfall amounts. The average rainfall for the month of August is 1.91 inches. The total amount of rainfall for the year is 4.00 inches. There were 28 of 31 days above 100 degrees for the month of August. The Texas Crop Moisture Index indicates the area as having "Severely Dry" soil conditions. The State Drought Monitor Index indicates the Concho Valley as having "Extreme" to "Exceptional" conditions. Corn and sorghum have been harvested, and cotton has been established.

Stream flow Conditions: Area reservoirs are showing a decrease in the amount of storage from the previous month's amounts. Lake Nasworthy is at 82% of capacity, impounding 8,168 acre-feet. O. C. Fisher is at 1% of capacity, impounding 1558 acre-feet. Twin Buttes Lake is at 8% of capacity, impounding 15,570 acre-feet.

Site	August Beginning Flows CFS	August Ending Flows CFS	August Historical Mean Flows
Concho Watermaster			
Spring Creek above Twin Buttes			
Reservoir	0.00	0.00	9.40
Concho River at San Angelo and			
Bell St.	5.90	2.10	37.00
South Concho at Christoval	1.87	3.80	24.00

Drought Restrictions: Currently there are restrictions and/or curtailment of diversions based on priority dates in the Concho Valley. All requests for diversion must be approved prior to diversion.

8. UPPER COLORADO (Concho River watershed not included)

The upper Colorado River area received less than normal precipitation during August 2011. The National Weather Service in San Angelo reported monthly precipitation of 1.64 inches. The reported year-to-date annual total is 4.58 inches, 9.49 inches below normal. According to the U.S. Drought Monitor, area drought conditions in Tom Green, Concho, Irion and Sterling Counties is "Extreme to Exceptional." Crockett, Coke, Reagan, Schleicher, Sutton, Kimble, Menard, Mason, and McCulloch counties have "Exceptional" drought conditions. USGS gauges indicate no flow in the Colorado River near Gail, TX down to Ballinger, TX. USGS gauges indicate less than the long term median flow in the San Saba River in Menard, TX, no flow near Brady, TX, and less than the long term median flow in San Saba, TX. The North Llano River above Junction had no flow. The Llano River below Junction, TX to the Llano River below Mason, TX had less flow than the long-term median. The pool levels of EV Spence Reservoir and OH Ivie Reservoir have decreased from July levels. The pool levels are 0.5% and 22.3% of capacity, respectively.

9. TEXAS PANHANDLE AND SOUTHERN HIGH PLAINS

Amarillo Area:

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48.37 ft.	47.06 ft.
66.74 ft.	65.58 ft.
33.23 ft.	31.63 ft.
	48.37 ft. 66.74 ft.

Reporting Station: National Weather Service-Amarillo 08.29.11

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	Precipitation (in.)	Average(in.)	Departure(in.)
August	0.53	2.76	-2.23
2011 Year-to-date	2.70	15.12	-12.42

Ending

Reservoir Status as of 08.30.11

Reservoir (Basin)	Conservation Pool (elevation)	Current (elevation)	Percent of Capacity	% Change (from last report)
Greenbelt (Red)	2664.00	2627.03	19.95	-1.58
Mackenzie (Red)	3100.00	3015.55	10.01	-0.54
Meredith (Canadian)	2936.50	2844.58	0.00	0.00

Lubbock Area:

Reporting Station: Lubbock Preston Smith International Airport (08.31.11)

	Precipitation (in.)	Average(in.)	Departure(in.)
August	0.34	1.91	-1.57
2011 Year-to-date	1.49	13.07	-11.58

Reservoir report: (Status as of 08.31.11)

Reservoir Basin (Brazos)	Conservation Pool (elevation)	Current (elevation)	% of Capacity	% Change (from last report)
Alan Henry	2220.00	2213.56	82.75	-1.77
White River	2372.20	2350.36	19.01	-2.74

10. WILDLIFE CONCERNS

No information was received by the time of this report.

11. AGRICULTURE CONCERNS

Oppressive heat and exceptional drought conditions continued to degrade agricultural conditions. August saw continued widespread liquidation of cow herds. Herd liquidation is so prevalent that many are concerned about the ability of ranchers to restock should normal rains return. Young calves continued to enter sale rings as ranchers sought to remove more livestock from ranches which were critically short of forages and water. Sale volumes remained very high at many auctions, and, in some cases, auctions were turning trucks loaded with cattle back as they were unable to handle the volume.

Crop harvest was mostly completed in the eastern half of the state. Cotton and sorghum yields were surprisingly good on the Gulf Coast and in the Rio Grande Valley due to residual soil moisture from tropical weather last summer, and helpful rains in January and May. Soil moisture levels were very low along the coast following harvest, and, with the prediction of drought through the winter, the potential does not look good for next spring. Corn harvest had reached the Blacklands of North Texas and cotton harvest was active along the coast. Yields have been generally disappointing. Corn and dryland cotton in the Central Texas Blacklands were very disappointing, with many fields abandoned, others yielding only a small fraction of normal yields. There is great concern for wind erosion over the vast expanses of the Edwards Plateau, Rolling and High Plains as farmers enter fall with very dry soils and no crop residue to reduce erosion. Irrigated farmers have not been spared. Wells with adequate irrigation capacity to produce good crops in average weather conditions have not been adequate to keep crops alive. Many producers of corn, cotton and sorghum have diverted water from part of their pivots to provide adequate water for the remainder of the pivot. With corn faring very poorly in the heat, corn farmers who also grow cotton are diverting water from corn fields to save cotton in the North Plains. Crops on the High Plains are maturing as much as a month early due to exceptionally high temperatures and drought stress.

AgriLife Extension economists released an estimate of crop and livestock losses on August 17. On that date it was estimated that direct losses to agricultural producers due to drought was \$5.2 billion and continuing. Losses continue to mount as livestock producers face exceptionally high prices for hay and supplemental feeds as well as costs of hauling water. Crop producers continued to face unusually high costs for irrigation as they pushed crops towards maturity.

The following are excerpts from reports of Texas AgriLife Extension regional reporters for the week ending on September 10:

Central: With another week of severe drought, stock tanks were drying up, and producers are hauling water for livestock. Many producers were sending livestock to local sale barns. The

cotton harvest was ongoing, with some dryland fields being abandoned. Wildfire burned several thousand acres of land and destroyed homes.

<u>Coastal Bend:</u> With no rain forecast, the entire region continued to suffer from extreme drought and high temperatures. The number of cattle taken to sale barns rose as ranchers culled herds due to lack of water and the high cost of feed. Some areas reported smoke from the fires burning in the Austin area.

<u>East:</u> Tens of thousands of acres burned across the region. Although many fires were contained as of this report, large fires in Marion and Cherokee counties were still out of control. There was no substantial rain reported in most of the region. San Augustine County was the exception, receiving as much as 2 inches in some areas. Stock tanks and ponds that have not already dried up were soon expected to. Producers continued to purchase hay out of state. Others culled more deeply into herds or were sold out entirely.

<u>Far West:</u> Temperatures were cooler this past week, with highs in the 90s. However, without rain, crops and pastures were expected to further decline. The region remained under severe drought conditions with burn bans firmly in place. In Midland County, sprinkler-irrigated cotton was in very poor condition, but some of the drip-irrigated cotton was considered "marginal." Ranchers continued to sell off livestock. Reports of cotton root rot and plant wilt were higher than usual. El Paso County cotton had a high incidence of boll rot. Pecans were at nut gel stage and still growing. The fifth cutting of alfalfa was being baled. Due to water quality issues and heat stress, alfalfa had some grass contamination.

North: The region remained very dry. However, livestock got some relief from cooler temperatures. Wheat farmers were trying to prepare land for planting, but found it difficult with dry, hard soils. Most crops were harvested. The only exceptions are a few late-maturing soybeans and cotton. Many cattle producers were trying to buy hay from out of state and had to pay extremely high prices to get the hay transported to Texas when they found it. Other producers culled herds and marketed calves early to relieve some of the grazing stress on their pastures. Some sold off entire herds. The emerging problem for livestock producers was water availability and water quality. Stock ponds were extremely low or dry at this time. There were reports of a few cattle dying of possible water toxicity. Wildfires destroyed thousands of acres of timber and pastures. The wildfire danger was extremely high.

<u>Panhandle:</u> The region remained dry but with some cooler temperatures. Soil-moisture levels were mostly very short. Cotton was in fair to very poor condition, with most counties reporting poor to very poor. Producers were still irrigating some cotton to add enough moisture to enable the crop to finish out. Some farmers were planting winter wheat. Rangeland and pastures were still rated very poor. Livestock producers continued to reduce herds, wean calves early, and supply supplemental feed to remaining cattle.

Rolling Plains: Cooler temperatures came to the region, giving residents a break from 100-plus degree weather. But conditions remained extremely dry. Wildfires were still burning in Palo Pinto County, but were mostly contained. Burn bans remained in place in all counties. Ranchers continued selling off cattle, but were being limited on the number they could take to sale barns due to the large amount of cattle being sold. Lack of grazing, hay shortages and the high cost of supplemental feed made it almost impossible to sustain cattle through the drought. Some producers were worried that if they sold off cattle, high cattle prices in the future will keep them from getting back into the cattle business. Some of the big ranches shipped cows out of state or to the feedlots to maintain their herds. Other counties reported that no dryland cotton will be harvested this year. Irrigated crops had a little help with the cooler temperatures, but only limited acres will be harvested, and quality is expected to be low. Stock tanks were low or completely

dry. Producers who were able to drill wells were testing water quality for livestock. Homeowners were also testing water wells to ensure their drinking water was safe as water tables dropped. Producers were waiting on rain to plant wheat and winter pastures.

<u>South:</u> Extremely hot weather continued to take its toll on all rangeland, pastures, soil-moisture levels and livestock. All counties reported very poor soil-moisture conditions. Livestock producers were still searching for supplemental feed and feed stores were having a difficult time meeting their needs. Some ranchers were resorting to burning prickly pear cactus. Very low stock-tank water levels were an ongoing concern for ranchers. Many Webb County ranchers completely liquidated herds, while others moved cattle to pastures with minimal forage but where there was access to water. More cattle were being sold at sale barns. Peanuts under irrigation were in fair to good condition. Cotton harvesting in Hidalgo County was finished, and cotton stalk destruction was nearly complete. Also in that area, growers were actively irrigating sugarcane, and producers were making preparations to begin harvesting the crop in a few weeks.

<u>South Plains</u>: High temperatures were in the 80s to mid-90s, with lows in the 50s and 60s. The region had some very light, spotty showers, but not enough moisture was received to have an impact on the drought. Cotton maturity was estimated to be 30 days ahead of average, and the harvest is expected to be finished early. Producers were beginning to shut off irrigation wells, and some started to apply harvest aids. Some corn was being harvested in the northern counties. Burn bans remained in effect in most counties. Some winter wheat was being planted.

<u>Southeast:</u> Extreme drought conditions continued. There was increased demand for rice hay. The cost to irrigate rice more than doubled this year. Drought-management strategies for cattle herds included shipping and weaning calves early, culling cows 8 years and older, supplementing protein and hay, and herd liquidation.

<u>Southwest:</u> The region remains in fire-alert status with no rain predicted. Firemen were near to controlling field fires that destroyed more than 40,000 acres of rangeland and about 1,500 homes in Bastrop, Bexar, Travis, Williamson and other counties. But high, dry winds continued to aggravate the ongoing drought. Almost all forage had been consumed by either cattle or wildlife, and many stock tanks were dry. Ranchers liquidated their herds. The few livestock that remained required heavy supplemental feeding. Also, there was minimal forage for wildlife, an important agricultural issue as wildlife resource management is the main income producing activity for a large proportion of the area's ranchers. The cotton harvest was completed. Cotton production will be down significantly this year as most dryland and partially irrigated cotton failed. The sweet-corn harvest was ongoing. Peanuts, pecans and landscape nursery crops continued to make good progress wherever irrigation water was available.

<u>West Central:</u> Temperatures cooled down some, but extremely dry conditions were ongoing. Increased wildfire danger was a big concern for all counties. Irrigated cotton was in fair condition. Small-grain planting was delayed as producers held off for rain. Rangeland and pasture conditions remained very poor. All water sources continued to drop. Hay was very hard to find and very expensive. Ranchers and producers continued to sell off livestock.

12. WILDFIRE CONCERNS

The Keetch-Byram Drought Index (KBDI) is used to help determine the potential for fire risk. It is a numerical index where each number is an estimate of the amount of precipitation, in 100ths of an inch, needed to bring the soil back to saturation. The index ranges from 0 to 800, with 0 representing a saturated soil, and 800 a completely dry soil. The relationship of the KBDI to fire danger is, as the index increases, the vegetation is subjected to increased moisture stress. KBDI levels and their relationship to expected fire potential are reflected in the following:

KBDI = 0 - 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of the spring dormant season following winter precipitation.

KBDI = 201 – 400: Typical of late spring and early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.

KBDI = 401 – 600: Typical of late summer and early fall. Lower litter and duff layers contribute to fire intensity and will burn actively.

KBDI = 601 – 800: Often associated with more severe drought and increased wildfire occurrence. Intense, deep-burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

As of August 31, 2011, there were 254 counties (illustrated in Attachment 2) with KBDI values in excess of 400. The values indicate areas within these counties are beginning to experience or sustain dry conditions which could result in an increased fire risk potential.

The Drought Preparedness Council is comprised of state agencies concerned with the effects of drought and fire on the citizens of the State of Texas. The attached information was compiled and provided by representatives listed below. Points of contact, telephone numbers, and web site addresses are also provided.

Nim Kidd, Texas Division of Emergency Management, (512) 424-2436, fax (512) 424-2444, website: http://www.txdps.state.tx.us/dem

Brenner Brown, Texas Water Development Board, (512) 475-1128, fax (512) 475-2053, website: http://www.twdb.state.tx.us

Chris Loft, Texas Commission on Environmental Quality, (512) 239-4715, fax (512) 239-4770, website: http://www.tceq.state.tx.us

Richard Egg, Texas State Soil & Water Conservation Board, (254) 773-2250, fax (254) 773-3311, website: http://www.tsswcb.state.tx.us

Lance Williams, Texas Department of Agriculture, (512) 463-3285, fax (800) 835-2981, website: http://agr.state.tx.us

Dr. Travis Miller, Texas AgriLife Extension Service, (979) 845-4808, fax (979) 845-0456, website: http://texasextension.tamu.edu

Cindy Loeffler, Texas Parks & Wildlife Department, (512) 912-7015, fax (512) 707-1358, website: http://www.tpwd.state.tx.us

Gilbert Jordan, Texas Department of Transportation, (512) 416-3270, fax (512) 416-2941, website: http://www.txdot.state.tx.us

Michael Dunivan, Texas Forest Service, (830) 997-5426, website: http://txforestservice.tamu.edu

Suzanne Burnham, Texas Department of State Health Services, (512) 801-9816, fax (512) 458-7111, website: http://www.dshs.state.tx.us/

Vacant, Office of the Governor, Economic Development & Tourism, (512) 936-0169, fax (512) 936-0141, website: http://www.governor.state.tx.us/divisions/ecodev

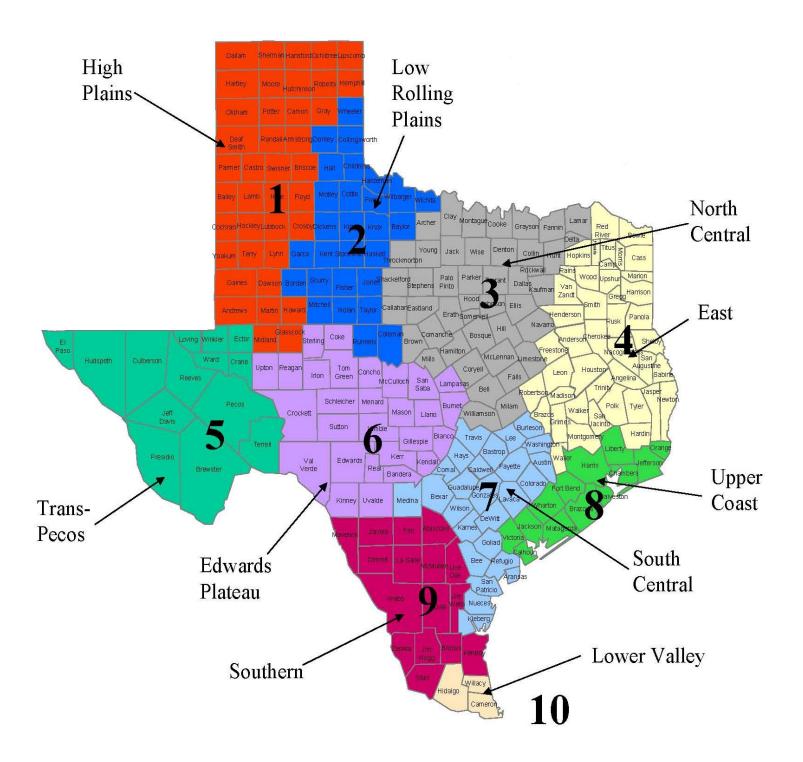
David A. Van Dresar, Texas Alliance of Groundwater Districts, (979) 968-3135, fax (979) 968-3194, website: http://www.texasgroundwater.org/

Dr. John W. Nielsen-Gammon, Office of the State Climatologist, (979) 862-2248, fax (979) 862-4466, website: http://www.met.tamu.edu/osc/

Gus Garcia, Texas Department of Rural Affairs, (979) 968-8307, fax (979) 968-8714, website: http://www.tdra.texas.gov

Marisa Callan, Texas Department of Housing and Community Affairs, (512) 475-3964, website: http://www.tdhca.state.tx.us

Attachment 1 Climatic Regions



Attachment 2 Counties with Extreme to High Fire Danger

